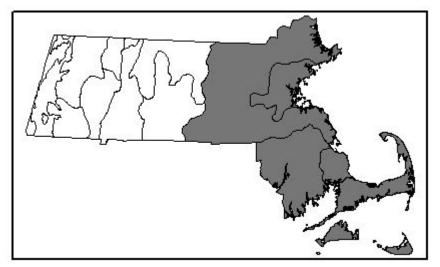
Community Name: MARINE INTERTIDAL: FLATS

Community CODE: CM2C000000

SRANK: S4



Concept: Marine intertidal areas protected from intense wave action, with relatively stable sediments, in

various proportions of silt, clay, sand, and organic materials.

Environmental setting: Found in protected, low-energy coastal sites, such as bays and coves behind headlands or barrier

beaches, between low and high tidal limits. More protected than Marine intertidal gravel/sand beaches. Marine intertidal flats are sometimes bordered by salt marshes on the landward side and tidal channels or subtidal eelgrass beds on the seaward side. Tidal flats are physically and biologically linked to other coastal marine systems; organisms of tidal flats depend upon organic

materials brought in from adjacent coastal, estuarine, riverine, and salt marsh habitats.

Vegetation Description: Includes some areas with eelgrass (*Zostera marina*), but other areas are sparsely vegetated.

Invertebrate species richness can be high. Mud areas tend to have a higher productivity than sand or

gravel areas. Micro-algae are abundant.

Associations:

Habitat Values for Habitat is used by many of the same species as use the intertidal gravel/sand beaches: Sanderlings Associated Fauna: (Calidris alba), Least Sandpipers (C. minutilla), Semipalmated Sandpipers (C. pusilla), Stilt

(Calidris alba), Least Sandpipers (C. minutilla), Semipalmated Sandpipers (C. pusilla), Stilt Sandpiper (C. himantopus), Greater Yellowlegs (Tringa melanoleuca), Black -bellied Plover (Pluvialis squatarola), and Semipalmated Plover (Charadrius semipalmatus) for foraging and staging during migrating. Resting areas for water birds when exposed. Habitat for polychaetes, snails, clams, oysters, sand dollars, and other invertebrates. Coastal and estuarine fishes migrate over tidal flats during high tides and feed on organisms in and on the sediments. During high tides, terns and water birds fish over flats. Mammals, reptiles, and amphibians do not seek out this

habitat.

Associated rare plants:

NONE KNOWN

Associated rare animals:

NONE KNOWN

Public Access:

Examples with Nauset Beach; Chatham Beach; Merrimack River mouth, Newbury.

Threats:

Management needs:

From: Swain, P.C. & J.B. Kearsley. 2001. Classification of the Natural Communities of Massachusetts. Version 1.3. Natural Heritage & Endangered Species Program, Division of Fisheries & Wildlife. Westborough, MA.

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Synonyms

USNVC/TNC: Non-vegetated.

MA (old name): Southern New England / Gulf of Maine Intertidal Low Energy Mud Flats.

ME: Marine: Intertidal mud flat community.

NH:

NY: Marine intertidal mudflats [mostly invertebrates].

CT:

RI: Marine intertidal mud flat.

Other:

Author: P. Swain **Date:** 6/9/99